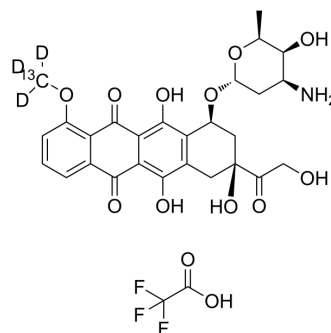


Doxorubicin-¹³C,₃D₃ TFA

Cat. No.:	HY-15142AS1
Molecular Formula:	C ₂₈ ¹³ CH ₂₇ D ₃ F ₃ NO ₁₃
Molecular Weight:	661.55
Target:	Antibiotic; Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	Anti-infection; Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Doxorubicin- ¹³ C, ₃ D ₃ (TFA) is the deuterium and ¹³ C labeled Doxorubicin. Doxorubicin (Hydroxydaunorubicin), a cytotoxic anthracycline antibiotic, is an anti-cancer chemotherapy agent. Doxorubicin inhibits topoisomerase II with an IC ₅₀ of 2.67 μM, thus stopping
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Doxorubicin- ¹³ C, ₃ D ₃ (TFA) has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Nitiss JL, et al. Targeting DNA topoisomerase II in cancer chemotherapy. *Nat Rev Cancer*. 2009 May;9(5):338-50.; Rhee HK, et al. Synthesis, cytotoxicity, and DNA topoisomerase II inhibitory activity of benzofuroquinolinediones. *Bioorg Med Chem*. 2007 Feb 15;15(4):1651-8.
- [2]. Rhee HK, et al. Synthesis, cytotoxicity, and DNA topoisomerase II inhibitory activity of benzofuroquinolinediones. *Bioorg Med Chem*. 2007 Feb 15;15(4):1651-8.
- [3]. John L Nitiss, et al. Targeting DNA topoisomerase II in cancer chemotherapy. *Nat Rev Cancer*. 2009 May;9(5):338-50.; Rhee HK,

Caution: Product has not been fully validated for medical applications. For research use only.

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